

ABSTRACT

[0071] A CMOS imager having multiple graded doped regions formed below respective pixel sensor cells is disclosed. A deep retrograde p-well is formed under a red pixel sensor cell of a semiconductor substrate to increase the red response. A shallow p-well is formed under the blue pixel sensor cell to decrease the red and green responses, while a shallow retrograde p-well is formed below the green pixel sensor cell to increase the green response and decrease the red response.

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